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February 27, 1997

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William F. Caton, Acting Secretary
Office of the Secretary
Federal Communications Commission
1919 M Street N.W.
Washington, D.C 20554

RE: FCC Notice of Proposed Rule Making 96-155 (WT Docket No. 96-86)

Dear Mr. Caton,

Recently, a copy of a January 16, 1997 letter by Dr. Richard Comroe addressing several issues raised by the Nevada Department of Transportation, Telecommunications Division (NDOT) reply comments was filed in the above referenced proceeding. Dr. Comroe's filing challenges certain NDOT comments and improperly implies, at least arguably, the filing represents positions taken by the Telecommunications Industry Association(TIA) and its' TR-8.10 Engineering subcommittee.

Enclosed for the record is a copy of a response to Dr. Comroe regarding his challenges to the NDOT comments.

Sincerely,

Robert J. Speidel, Esq.
Manager, Regulatory Programs

Enclosure

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February 27, 1997

Dr. Rich Comroe
Motorola, Inc.
1301 E. Algonquin Rd.
Schaumburg, IL 60196

RE: Reply Comments to Federal Communications Commission NPRM Docket No. 96-86

As you are aware, issues surrounding "feature enhancement" continue to be a topic of discussion within the TIA forum in the ongoing standardization effort commonly known as Project 25. As a participant in these TIA subcommittees, I am concerned that your filing may incorrectly imply that the views expressed are those of TIA and it's TR8.10 subcommittee. As you are aware, Section 12.3 of the TIA Engineering Manual prohibits formulating group members from speaking the name of TIA or transmitting outside of TIA "any document which appears to present a public position on behalf of the Association or any of its parts."

The fundamental point made by the Nevada Department of Transportation, Telecommunications Division (NDOT) is that interoperability is not enhanced by proprietary features in a standard and justifiably does not warrant allocation of public resources, specifically spectrum. Unfortunately, your comments concentrated on the guaranteed integration of proprietary features in a Project 25 system, and the ability to add proprietary features to the core specification at anytime.

First, there are several complications which could prevent the adoption of a proprietary feature into the core Project 25 specification.

1. Normally proprietary features are protected by patents and are used for product differentiation in the marketplace. A manufacturer who has successfully marketed such features is unlikely to cooperate or agree to license this technology to its competitors.

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2. Several enhancements to the Project 25 specification have already been disapproved within TIA subcommittees, because these enhancements would have required modification to the Project 25 air interface.
3. If the proprietary feature is not cost justifiable because existing products must be retrofitted, the manufacturing community may vote against the feature inclusion.
4. If it is determined that existing product changes are not warranted and that only future products would incorporate the feature, there is a potential risk of loss of interoperability between product phases.

Contrary to your assertion, the Project 25 specification does not guarantee enhanced feature integration. In fact, although feature integration is permitted, it is as yet undefined. Subsequently, it may not be possible to predict how proprietary features will affect the operation of equipment using standard features. This operational instability may risk user safety. Specifically,

1. As you have noted, the Project 25 user requirements define a necessity for a safeguard to protect against unintentional interaction between compliant (equipment operation using standard features) and non-compliant (equipment operation using proprietary features) equipment operating on the same system. Unfortunately, the operation and interaction of non-compliant equipment on a Project 25 system is not governed by any existing TIA procedures or documents. For example, a non-compliant radio operating on a Project 25 system may not release a channel at the command of the console in an emergency situation.
2. In addition, the co-existence of compliant and non-compliant equipment also may result in a serious security violation. During the initial process of the system design, each feature and function is designed to co-exist in a predetermined manner. The implementation of the standard is then verified through compliance and lockdown tests to ensure standard conformance and equipment interoperability. However, the allowance of non-compliant radios operating on a 'certified' system means that features and functions performed by such radios have <u>not been determined</u> as to their interaction with and effect upon the system. This backdoor operation is a fundamental security breach and endangers the operation and users of a 'certified' system.
3. Certainly, since future features have yet to be defined, guaranteed integration may be elusive.

As noted by NDOT, a standard with proprietary features not only does not guarantee interoperability, they may actually interfere with it. The resulting lack of interoperability poses a potential risk to the user. This user risk assessment has been summarized in your comment, "any feature not explicitly provided by a

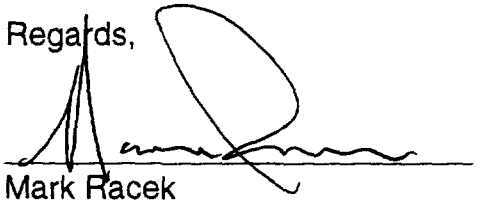
standard could be added to a standard system by any manufacturer, putting the user at risk because feature enhancements are wholly uncoordinated between manufacturers."

For example, a specific proprietary feature may be implemented by several manufacturers. However, the feature implementation, unless standardized, is not guaranteed to be interoperable between the manufacturers. For instance, suppose a public safety official roams between two Project 25 compliant systems and attempts to access a common proprietary feature used in both systems. In the official's home system, in order to activate the feature, the particular key sequence is defined one way, but in the visited system, the key sequence to activate the feature has been defined differently. If this feature is a request for backup, the Public Safety official could be placed in eminent danger.

Some Project 25 participants would argue that proprietary features can be added at any time to the Project 25 specification. In reality, it is unlikely that proprietary features would ever be incorporated into the core specification. Therefore, the addition of these features and/or the operational co-existence of compliant and non-compliant equipment are likely to perpetuate islands of unique communication contrary to the interoperability objectives of Project 25 and may ultimately endanger the safety and security of its users.

Finally, contrary to your assertion, lack of direct participation in the Project 25 forum is not always a barrier to understanding the critical issues that impact the users. In fact, participation may narrow participants' views to the point they are unable to recognize critical issues.

Regards,



Mark Racek
Ericsson, Inc.
Technical Marketing Manager

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